

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF OREGON**

**WATERWATCH OF OREGON;
PACIFIC COAST FEDERATION OF
FISHERMEN’S ASSOCIATIONS;
INSTITUTE FOR FISHERIES
RESOURCES; and STEAMBOATERS,**

Plaintiffs,

v.

**WINCHESTER WATER CONTROL
DISTRICT,**

Defendant.

Case No. 3:20-cv-01927-IM

**FINDINGS OF FACT AND
CONCLUSIONS OF LAW**

Janette K. Brimmer, Molly Tack-Hooper, Charisa Gowen-Takahashi, and Noelia Gravotta, Earthjustice, 810 Third Avenue, Suite 610, Seattle, WA 98104; and Karl G. Anuta, Law Office of Karl G. Anuta, P.C., 735 SW First Avenue, 2nd Floor, Portland, OR 97204. Attorneys for Plaintiffs.

Dominic M. Carollo, Audrey F. Boyer and Nolan G. Smith, Carollo Law Group LLC, 2315 Old Highway 99 South, Roseburg, OR 97471; and Aaron Bruner and Derek Gauthier, Western Resources Legal Center, 9220 SW Barbur Boulevard, Suite 119-327, Portland, OR 97219. Attorneys for Defendant.

IMMERGUT, District Judge.

This matter is before the Court following a 5-day bench trial. Plaintiffs, environmental conservation and fisheries organizations, allege that the Winchester Dam on the North Umpqua River is causing “take” of Oregon Coast coho salmon, a federally listed threatened species. Plaintiffs allege that the dam (1) delays adult salmon migration, (2) kills, injures, and exhausts adult salmon by inducing them to jump at the dam face, (3) kills, injures, and exhausts adult salmon while they attempt to navigate the fish ladder, and (4) kills or injures out-migrating juveniles that fall over the dam face.

Plaintiffs sued Defendant Winchester Water Control District, the owner of the Winchester Dam, under Section 9 of the Endangered Species Act, 16 U.S.C. § 1538(a)(1)(B). Plaintiffs seek injunctive relief requiring Defendant to either construct a new fish passage facility or remove the dam entirely. This action was stayed between January 1, 2022, and May 1, 2023, to allow Defendant to perform planned repairs to the Winchester Dam. ECF 52, 72. Those repairs were completed in the summer of 2023. Status Report, ECF 91 at 2; Joint Pretrial Order, Stipulated Facts (“Agreed Facts”), ECF 124 ¶ 11. This matter was tried to the Court from April 21, 2025, to April 25, 2025. ECF 152–156. The parties filed proposed findings of fact and conclusions of law on May 28, 2025. ECF 159, 161.

Having considered the testimony presented at trial, the exhibits admitted into evidence, and the record, this Court hereby enters the following Findings of Fact and Conclusions of Law pursuant to Federal Rule of Civil Procedure 52(a). To the extent that any findings of fact may be construed as conclusions of law, the Court adopts them as such. To the extent that any conclusions of law constitute findings of fact, the Court adopts them as such.

Based on these Findings, this Court concludes that Plaintiffs have failed to establish by a preponderance of the evidence that Defendant is liable under the Endangered Species Act for “take” of Oregon Coast coho salmon through its operation of the Winchester Dam.

FINDINGS OF FACT

A. Plaintiffs

1. Plaintiff WaterWatch of Oregon is a non-profit conservation organization dedicated to protecting and restoring Oregon’s rivers. Agreed Facts, ECF 124 ¶¶ 35–37.

2. Plaintiff WaterWatch has devoted substantial resources to removing dams, including the Winchester Dam, and restoring Oregon’s rivers to a more natural state. Agreed Facts, ECF 124 ¶¶ 37–38.

3. Plaintiff WaterWatch has individual members who fish and recreate along the North Umpqua River and whose interests include increasing coho salmon populations in the river. Agreed Facts, ECF 124 ¶¶ 39–51.

4. Plaintiff Pacific Coast Federation of Fishermen’s Associations (“PCFFA”) is a trade organization representing family-owned commercial fishing businesses on the West Coast. Agreed Facts, ECF 124 ¶ 52.

5. Plaintiff Institute for Fisheries Resources (“IFR”) is a nonprofit organization incorporated by PCFFA that advocates for coastal communities that depend on the fisheries industry. Agreed Facts, ECF 124 ¶ 56.

6. IFR manages and directs certain programs for PCFFA, including programs focused on salmon protection and habitat restoration in Oregon. Agreed Facts, ECF 124 ¶ 57.

7. PCFFA has members whose ability to fish for other salmon species depends in part on the abundance of Oregon Coast coho salmon. Agreed Facts, ECF 124 ¶¶ 58–59, 64–66.

8. PCFFA and IFR have previously advocated against the harm they believe the Winchester Dam is causing to the population of Oregon Coast coho salmon in the North Umpqua River.

Agreed Facts, ECF 124 ¶ 60.

9. Plaintiff Steamboaters is a member-based nonprofit conservation organization dedicated to restoring wild fish populations on the North Umpqua River. Agreed Facts, ECF 124 ¶ 20.

10. Steamboaters is a longstanding advocate for the removal of the Winchester Dam, which it believes delays the upstream migration of Oregon Coast coho salmon. Agreed Facts, ECF 124 ¶ 22.

11. Steamboaters has members who live along, fish in, and recreate near or on the North Umpqua River. Agreed Facts, ECF 124 ¶¶ 23–34.

12. Steamboaters has members who believe their enjoyment of the river would be improved by higher populations of Oregon Coast coho. Agreed Facts, ECF 124 ¶¶ 23, 31, 34.

B. Defendant

13. Defendant Winchester Water Control District (“WWCD”) is a unit of local government that represents owners of properties adjacent to the reservoir created by the Winchester Dam. Trial Testimony, ECF 165 at 569:18–:23.

14. WWCD owns and operates the Winchester Dam. Agreed Facts, ECF 124 ¶ 1. WWCD also owns abutments and adjacent property. Trial Testimony, ECF 165 at 570:3–:10.

C. Winchester Dam

15. The Winchester Dam spans the 450-foot width of the North Umpqua River at Winchester, Oregon. Agreed Facts, ECF 124 ¶ 5.

16. Most of the river flows over the top of the dam, while some is diverted into the dam’s fish ladder. Joint Stipulated Findings of Fact (“Additional Stipulated Facts”), ECF 158 ¶ 5.

17. Although initially constructed to generate electricity, the Winchester Dam now serves solely to impound a reservoir used by WWCD's members for recreation. Additional Stipulated Facts, ECF 158 ¶¶ 1–4.

18. The Winchester Dam was originally constructed as a timber crib dam in 1890. In 1907, additional construction raised the height of the dam to 16 feet, and some concrete components were added to the timber crib structure at a later date. Agreed Facts, ECF 124 ¶¶ 2–4.

19. Timber crib dams have a wooden structure of square timber cribs filled with gravel or sand, typically faced with wooden planks. Trial Testimony, ECF 163 at 36:4–11.

1. Fish Ladder

20. A fish ladder was added to the northern end of the Winchester Dam in 1945 and remodeled in 1983. Agreed Facts, ECF 124 ¶ 6.

21. The fish ladder is located on the northern bank of the river. Trial Testimony, ECF 163 at 31:2–3.

22. At the Winchester Dam, the thalweg of the North Umpqua River is on the south side of the river. Trial Testimony, ECF 166 at 841:20–22, ECF 163 at 167:24–168:3.

23. An area of shallow water and some exposed bedrock separates the fish ladder structure on the north side of the river from the primary flow on the south side. Trial Testimony, ECF 163 at 110:21–111:2.

24. The fish ladder includes fish counting facilities, a fish count window and other public viewing windows operated by the Oregon Department of Fish and Wildlife (“ODFW”) pursuant to a perpetual easement granted to ODFW by WWCD in 1970, as well as a fish trap operated by ODFW to collect broodstock for hatchery programs in the Umpqua basin. Agreed Facts, ECF 124 ¶ 8; Trial Testimony, ECF 165 at 570:19–572:19.

25. ODFW manages flows of water through the ladder, including by manipulating the auxiliary water intake and placing boards in the fish ladder, to facilitate its fish-counting and fish-trapping activities at the Winchester Dam. Additional Stipulated Facts, ECF 158 ¶ 6.

26. Fish are required to pass through a narrow “crowder” channel to navigate the fish ladder, which is designed to limit the number of fish that can pass at once to facilitate ODFW’s fish-counting and fish-trapping activities. Agreed Facts, ECF 124 ¶ 9. This channel requires fish to pass a window where ODFW and a volunteer organization maintain cameras used to count fish passage. Trial Testimony, ECF 165 at 570:19–572:19.

27. The crowder channel has a ten-inch-wide exit gap. A “crowder gate” located at the upstream end of the crowder may be closed to prevent fish from exiting the ladder, thus blocking upstream fish passage. Additional Stipulated Facts, ECF 158 ¶ 7.

28. ODFW closes the crowder gate to clean the ladder and to divert fish into a “jail” area located directly behind the crowder for trapping. Additional Stipulated Facts, ECF 158 ¶ 8.

29. ODFW staff have occasionally neglected to open the crowder gate after completing their cleaning or trapping activities. Additional Stipulated Facts, ECF 158 ¶ 9.

2. 2023 Repairs

30. Wooden crib dams are naturally porous, and leaks have been observed and documented through and under the Winchester Dam structure throughout its history. Additional Stipulated Facts, ECF 158 ¶ 10; Trial Testimony, ECF 163 at 36:12. At times, up to 35% of flow has passed through the dam’s face rather than over its crest. Trial Testimony, ECF 163 at 182:4–11.

31. WWCD has placed plywood and plastic sheeting on the upstream face of the dam in an effort to reduce water leakage through the structure. Trial Testimony, ECF 163 at 40:18–41:6.

32. A hole in the north end of the dam face, near the fish ladder, resulted in a notable flow of water through the dam face between approximately 2018 and 2023. Additional Stipulated Facts, ECF 158 ¶ 11.

33. From August 7, 2023, to September 5, 2023, WWCD drew down the reservoir and dewatered the fish ladder in order to construct a concrete stem wall near the fish ladder. Agreed Facts, ECF 124 ¶ 11. The purpose of this project was to limit flows of water through holes in the north end of the dam face, where the timber crib structure meets the dam's fish ladder. *Id.*

34. In the course of these repairs, DOWL, the engineering firm retained by WWCD, discovered that the dam's vertical post timbers were disconnected from the base. Trial Testimony, ECF 163 at 45:23–46:9. WWCD installed a steel framework on the downstream face of the dam, secured in place with tieback rods. *Id.* 37:15–21, 38:12–39:12. The existing timber posts help limit water leakage, but no longer have a structural function. *Id.* at 46:2–9. The new steel lattice extends approximately two feet from the existing dam face. *Id.* at 48:2–14.

35. The repairs also expanded a concrete sill at the base of the dam, which now juts out approximately two feet from the base of the dam. Trial Testimony, ECF 163 at 38:23–25, 56:17–20, 169:2–9.

36. These repairs reduced the flow of water through and under the Winchester Dam by constructing a new concrete stem wall located at north end of the dam face, where the fish ladder structure meets the dam structure. Trial Testimony, ECF 163 at 64:9–13. Longtime ODFW fisheries technician Fabian Carr testified that these repairs addressed his concerns about false attraction flows through the dam structure. *Id.*, ECF 165 at 682:17–25, 687:11–19.

37. Although these repairs reduced the flow of water through the dam at the north end, some water continues to seep through the point where the dam meets the fish ladder, Trial Testimony,

ECF 163 at 64:20–66:2, through the dam face, including around the new tieback anchors, *id.* at 51:15–52:5, and toward the base of the dam across the dam face, *id.* at 52:6–53:2, 59:16–21.

38. Voids in the interior of the crib dam structure, between the timber face and the soil or gravel fill, continue to exist and contribute to some leakage through the dam face. Trial Testimony, ECF 163 at 53:3–17.

39. WWCD attempted to fill some of the voids behind the dam face, but did not receive approval for the fill material from the Department of Environmental Quality and had to discontinue this practice. Trial Testimony, ECF 163 at 61:17–62:8, 77:8–79:16.

40. In an effort to remedy leaks around the south end of the dam, a contracting firm retained by WWCD injected a large volume of polyurethane foam. Trial Testimony, ECF 165 at 603:9–13, 606:24–607:7.

41. Although this foam injection may not permanently resolve leakage through the south end of the dam, Trial Testimony, ECF 163 at 78:17–80:22, it has substantially reduced leakage through the south end as of the present, *id.*, ECF 165 at 607:4–7. Some leakage nonetheless continues through the sluice gates near the south end of the dam, Trial Testimony, ECF 163 at 219:1–22 as well as through the wall and bay of the old powerhouse on the south bank, *id.* at 228:14–229:5.

42. As part of the 2023 repairs, WWCD also removed some extraneous pieces of old metal from various locations on the dam. Trial Testimony, ECF 165 at 624:3–7.

D. Oregon Coast coho salmon

43. Oregon Coast coho salmon are an evolutionarily significant unit of coho salmon listed as threatened under the Endangered Species Act. Additional Stipulated Facts, ECF 158 ¶ 17.

44. There are 21 independent populations of Oregon Coast coho salmon that do not substantially interbreed with fish from any other independent population. Additional Stipulated Facts, ECF 158 ¶ 18.

45. One such independent population is the North Umpqua population. Additional Stipulated Facts, ECF 158 ¶ 18.

46. The North Umpqua River, including the stretch of river crossed by the Winchester Dam, is critical habitat for Oregon Coast coho salmon. Agreed Facts, ECF 124 ¶ 16.

47. Some Oregon Coast coho salmon spawn in the North Umpqua River and its tributaries above the Winchester Dam, and therefore must migrate past the dam to reach spawning areas. Agreed Facts, ECF 124 ¶ 17.

48. Approximately 160 miles of habitat for coho salmon and other anadromous¹ fish is located upstream of the Winchester Dam on the North Umpqua River. Trial Testimony, ECF 163 at 192:18–193:2.

49. Virtually all of the ideal habitat for coho spawning—low-gradient streams with gravel or small cobble substrate—in the North Umpqua basin is located upstream of the Winchester Dam. Trial Testimony, ECF 164 at 310:8–:22.

50. While overharvesting caused an initial decline in coho populations, ideal spawning habitat in the North Umpqua Basin has been limited by forestry and agricultural practices that limit access to habitat and reduce its complexity, which continues to limit coho populations. Trial Testimony, ECF 166 at 882:12–:21.

¹ Anadromous fish are fish that hatch in freshwater streams, migrate downriver, and spend most of their lives in the ocean before returning to freshwater to spawn. *See San Luis & Delta-Mendota Water Auth. v. Locke*, 776 F.3d 971, 986–87 (9th Cir. 2014) (describing the life cycle of salmon). Anadromous fish species of the North Umpqua include coho and Chinook salmon, steelhead, and Pacific lamprey. Trial Testimony, ECF 163 at 33:13–:16

51. Populations of Oregon Coast coho have grown significantly since the species was initially listed as threatened as a result of harvest reforms, habitat improvement efforts, and improving ocean conditions. Trial Testimony, ECF 166 at 895:7–:22.

52. This population improvement has allowed ODFW and the National Marine Fisheries Service to open a limited recreational fishery for wild coho in the ocean and estuaries during most years. Trial Testimony, ECF 166 at 765:2–:25.

53. The annual upstream migration of Oregon Coast coho on the North Umpqua River typically occurs in September through December, with the majority of fish migrating in November and December. Additional Stipulated Facts, ECF 158 ¶ 13.

54. Coho salmon do not eat during their migration, instead relying on their energy reserves to migrate upstream and successfully spawn. Trial Testimony, ECF 164 at 313:23–314:5.

55. Because coho salmon are limited to the energy reserves they have when they begin their migration, they have a limited period of time to spawn, and will spawn outside of ideal habitat if they reach sexual maturity before reaching their optimal habitat. Trial Testimony, ECF 164 at 314:8–:13, 407:14–408:10.

56. Delay or exhaustion in migration can cause a fish to fail to spawn or to spawn in undesirable habitat. Trial Testimony, ECF 164 at 314:10–:19, 432:21–433:14.

57. Spawning outside of ideal habitat can significantly reduce the survival of offspring. Trial Testimony, ECF 164 at 314:20–315:2, 438:21–439:2.

58. In migrating upstream, adult coho salmon generally follow the edge of the thalweg of the river, using hydraulic conditions and flow to orient themselves, Trial Testimony, ECF 164 at 315:21–316:4, ECF 166 at 841:13–:18, as well as scent, chemical and visual cues, and sound, *id.*, ECF 164 at 412:25–413:18.

59. Salmon encountering an obstacle will attempt to use sensory cues to find a pathway through or around the obstacle that requires the least amount of energy expenditure or physical risk. Trial Testimony, ECF 164 at 316:22–317:3, 414:2–415:2.

60. Salmon attempting to navigate through high-velocity or high-turbulence flows will sometimes engage in “burst swimming,” or swimming at high rates of speed for short periods of time. Trial Testimony, ECF 164 at 475:12–:18. This is an anaerobic process that requires expending significant amounts of energy. *Id.* at 475:19–476:13.

61. Juvenile coho typically spend about one year in freshwater before migrating downstream to the ocean. Additional Stipulated Facts, ECF 158 ¶ 14.

62. Juvenile coho hatched upstream of the dam must pass the Winchester Dam to reach the ocean, which typically occurs by going over the crest of the dam. Additional Stipulated Facts, ECF 158 ¶ 16.

63. This out-migration typically peaks between March and June of each year. Additional Stipulated Facts, ECF 158 ¶ 15.

E. Expert Witnesses

64. Plaintiffs presented expert testimony from Scott Wright, a water resources engineer specializing in fish passage and other in-stream structures. Trial Testimony, ECF 163 at 24:19–:25. Mr. Wright has been the engineer of record for over 25 dam removals and has worked on over 50 dam removal projects. *Id.* at 25:7–:20, 177:17–:20, 183:16–:18.

65. Plaintiffs also presented expert testimony from Jeff Dose, a retired fisheries biologist who spent 24 years as the forest fisheries biologist for the Umpqua National Forest. Trial Testimony, ECF 164 at 301:8–302:18. In this role, Mr. Dose was responsible for evaluating the impacts of federal actions on fish and aquatic resources, including evaluating all projects that may affect coho salmon. *Id.* at 302:3–:13. He also designed and conducted stream surveys and other

monitoring activities throughout the Umpqua National Forest. *Id.* at 302:22–303:20. Mr. Dose is currently the vice president of Plaintiff Steamboaters. *Id.* at 387:25–388:3.

66. Plaintiffs also presented expert testimony from Dr. Chris Frissell, the director of graduate studies for the Natural Resources Management Graduate Program and chair of the Department of Hydrology at Salish Kootenai College. Trial Testimony, ECF 164 at 397:15–398:13. Dr. Frissell is a research ecologist and freshwater conservation biologist specializing in salmonids. *Id.* at 398:21–399:11. Dr. Frissell is a member of Plaintiff Steamboaters and has served as an expert witness in multiple cases brought by Plaintiff WaterWatch. *Id.*, ECF 165 at 527:14–528:2.

67. Defendants presented expert testimony from Dave Loomis, a fisheries biologist who previously worked for the Oregon Department of Fish and Wildlife. Trial Testimony, ECF 165 at 717:20–718:4. At the time of his retirement, Mr. Loomis served as a watershed district manager for the Umpqua basin. *Id.* at 721:10–:19. He continues to volunteer with the Umpqua Fishery Enhancement Derby, which operates the livestream camera at Winchester Dam. *Id.* at 727:13–730:2.

68. Defendants also presented expert testimony from Ian Courter, a fisheries scientist who owns a science consulting firm. Trial Testimony, ECF 166 at 865:6–:18. Mr. Courter specializes in salmonid research and has performed a variety of related projects, including assessment of juvenile salmonid passage at in-stream structures and the salmonid habitat production potential of streams. *Id.* at 867:2–869:9.

69. Each of Plaintiffs’ experts, identified above, has a personal or professional interest in the removal of the Winchester Dam, which reduces the weight the Court is willing to give their testimony. This Court found no evidence of bias with respect to Defendant’s expert witnesses. This Court found Mr. Loomis’s testimony to be highly credible, particularly because of his

extensive experience in fisheries management in the Umpqua basin. This Court also found Mr. Courter's testimony to be highly credible given his background and experience.

70. This Court also gives less weight to the testimony of Mr. Dose and Dr. Frissell because they did not perform any site-specific analysis of how the Winchester Dam affects coho. Mr. Dose did not cite scientific literature supporting the opinions in his expert report, Trial Testimony, ECF 164 at 380:4–:13, and did not quantify the delay he attributed to the dam, *id.* at 382:24–383:2. Dr. Frissell concluded that “at least some coho are not making it past Winchester Dam,” but likewise could not quantify the number of adult coho who failed to pass the dam. *Id.*, ECF 165 at 510:10–:15. Dr. Frissell did not conduct a scientific study to support his expert report. *Id.* at 509:12–:21. Dr. Frissell visited the dam twice, *id.* at 540:12–:15, and could not recall specifically observing a coho on either visit, *id.* at 507:12–:15.

71. The testimony provided by Defendant's expert witnesses was more credible than the testimony provided by Plaintiffs' witnesses. This Court accordingly gives more weight to the testimony of Defendant's experts in the findings of fact below.

F. Direct Injury to or Delay of Adult Coho by False Attraction Flows

72. Coho salmon will jump at flows to attempt to find a path around obstacles such as waterfalls, rapids, or debris. Trial Testimony, ECF 164 at 321:9–:14, 415:7–:17.

73. A “false attraction flow” is a flow of water that induces a fish to jump at it, but which does not actually lead to a path around the obstacle. Trial Testimony, ECF 164 at 272:3–:11.

74. False attraction flows over or through a dam are flows that divert a fish away from the fish ladder entrance and induce it to jump at other parts of the dam structure. Trial Testimony, ECF 163 at 60:12–:23.

75. In 2020, ODFW raised concerns that leaks through the dam face were creating false attraction flows. Trial Testimony, ECF 165 at 615:15–:22.

76. The 2023 maintenance project attempted to address the false attraction flows identified by ODFW. Trial Testimony, ECF 165 at 617:9–11. ODFW technician Fabian Carr testified that the 2023 repairs addressed his concerns about false attraction flows. *Id.* at 682:10–25.

1. Direct Injury

77. Resolving factual conflicts between Plaintiffs’ experts’ testimony and Defendant’s experts’ testimony, this Court finds that Plaintiffs have not proven by a preponderance of the evidence that Oregon Coast coho are killed or injured by false attraction flows at Winchester Dam.

78. This Court credits testimony from Plaintiffs’ experts that some water continues to leak through the dam, Trial Testimony, ECF 163 at 62:11–16, ECF 164 at 332:4–333:4, including through the sill at the base of the dam, *id.*, ECF 163 at 65:25–67:12, and at the interface point where the fish ladder meets the dam face at the north end of the dam, *id.* at 65:1–10, as well as flowing over the ogee spillway, *id.* at 68:10–69:4.

79. This Court credits testimony from Plaintiffs’ witnesses that salmonids have been observed jumping unsuccessfully at the face of the dam, Trial Testimony, ECF 163 at 82:9–16, 85:13–20, 195:7–12, 196:1–10, 198:10–15, 209:14–210:2, ECF 164 at 272:15–273:1, 277:22–278:3, 329:24–330:7, 334:18–335:6, 449:3–16, ECF 165 at 681:2–24, 706:1–707:4, at the ogee spillway, *id.*, ECF 163 at 196:5–9, 213:2–18, 214:10–12, 216:5–25, 217:12–25, ECF 164 at 273:7–274:12, 275:18–276:2, 450:5–19, and at the interface between the dam and the fish ladder near the dam’s north end, *id.*, ECF 163 at 196:1–5, 197:25–198:3, 199:2–15, 208:24–209:11, ECF 164 at 330:21–25, ECF 166 at 756:11–15, 798:15–799:5. Although this Court credits testimony that coho salmon do not jump at flows as often as other salmonids like steelhead trout and chinook salmon, *id.*, ECF 165 at 681:2–24, ECF 166 at 799:1–9, this Court will assume that at least some of the salmonids observed jumping at the dam are coho salmon.

80. Although this Court credits testimony that coho salmon may jump at the Winchester Dam, this Court does not find Plaintiffs have proven by a preponderance of the evidence that coho salmon were physically killed or injured as a result of jumping at flows through the dam.

81. Plaintiffs' experts testified that jumping at the dam risks injury: a jumping salmonid may slam into the steel lattice or tieback anchors on the dam face, Trial Testimony, ECF 163 at 48:8–:10, ECF 164 at 333:20–:21, concrete features including the spillway, fish ladder, and sill below the dam, *id.*, ECF 163 at 48:10–:11, ECF 164 at 333:21–:25, 339:2–:5, and the bedrock below the dam, *id.*, ECF 333:25–334:2. Plaintiffs' experts testified that this could cause bruising, gashes, injuries to fins, or descaling. *Id.*, ECF 164 at 341:15–342:3. As Plaintiffs' expert Mr. Dose acknowledged, however, the fact that salmon were observed jumping at the dam does not prove that they were injured or killed, or that they did not succeed in migrating upstream. *Id.* at 382:11–:23. This Court finds that Plaintiffs have failed to support a conclusion that evidence of salmonids jumping at the dam amounts to proof of harm to coho.

82. Plaintiffs presented two exhibits that they contended depicted injuries to Oregon Coast coho consistent with unsuccessfully jumping at the dam face: Exhibits 139 and 1175. As described below, however, this Court cannot find by a preponderance of the evidence that either exhibit depicts injuries resulting from jumping at the dam.

83. Exhibit 139 is a photograph of a coho salmon in the Winchester Dam fish ladder with a chunk of flesh missing from its snout, captured in 2022 on the livestream fish camera. *See* Trial Testimony, ECF 164 at 285:10–286:20 (identifying this exhibit); *id.* at 348:9–:24 (same).

84. Resolving a dispute of fact between the parties' experts, this Court finds credible the testimony of Defendant's expert Ian Courter that this injury is more likely to be the result of "head burn," a naturally occurring fungal infection that develops following an abrasion or other

physical injury to the salmon. Trial Testimony, ECF 166 at 922:9–17. Mr. Courter testified that, given the progression of this injury, it was unlikely to have happened within the last several days, and so likely began to develop well before the fish arrived at the dam. *Id.* at 923:10–15.

85. Plaintiffs’ expert Jeff Dose testified that there were “numerous” potential causes of this injury, one of which “could be” jumping and making contact with a hard surface of the dam. Trial Testimony, ECF 164 at 349:2–4. Mr. Dose presented this opinion as just one “possibility.” *Id.* at 349:5. This Court finds Mr. Courter’s explanation more convincing than Mr. Dose’s.

86. Exhibit 1175 is a photograph taken from the Winchester Dam livestream fish camera of a coho salmon with a large and fairly recent gash along its midline. Trial Testimony, ECF 164 at 472:12–22 (identifying this exhibit); ECF 166 at 835:16–836:4.

87. Plaintiffs’ expert, Dr. Chris Frissell, testified that this injury was “very consistent with the kind of injury” that would be expected from a fish jumping at the dam and encountering a sharp object. Trial Testimony, ECF 164 at 472:25–473:10; *see also* ECF 163 at 163:9–15 (Mr. Wright suggesting this injury was “probably caused from steel cuts after jumping against the dam”). Defendant’s expert, Mr. Dave Loomis, testified that there was no way to evaluate whether the injury was caused by the dam, *id.*, ECF 166 at 803:20–22, but that he reviewed video from the fish ladder from three days before and after the injured coho, and identified no similar injuries on the approximately 1,100 coho that passed through the ladder during that time, *id.* at 805:10–14. Mr. Loomis suggested that the cause of the injury could be a predator or one of the several sharp objects he has observed in the river, among other possibilities. *Id.* at 805:23–806:6.

88. Resolving a dispute of fact between the parties’ experts, this Court finds Mr. Loomis’s testimony credible and persuasive. This Court finds that, while this injury may be consistent with jumping at the dam, it is also consistent with many other sources of injury that the fish could

have encountered which are equally plausible. This Court cannot find by a preponderance of the evidence that this injury was caused by the dam as opposed to other potential sources of injury.

89. Plaintiffs presented two additional exhibits, Exhibits 19 and 98, that may suggest injury caused by jumping at false attraction flows. This Court finds that these exhibits likewise do not prove by a preponderance of the evidence that false attraction flows at the Winchester Dam have physically killed or injured coho salmon.

90. Exhibit 19 is a 2023 video depicting a salmonid jumping toward the face of the dam. *See* Trial Testimony, ECF 163 at 82:25–83:13 (identifying this exhibit). While this fish likely collided with some part of the dam, *id.* at 83:16–82:4, this Court cannot find that it was killed or suffered injury because of this jump. Plaintiffs’ expert Mr. Dose testified only that this jump “could result in injury,” *id.*, ECF 164 at 336:22–:25, but there is no evidence that it did.

91. Exhibit 98 is a 2024 video that depicts a hatchery Chinook salmon with approximately two inches of its snout missing. *See* Trial Testimony, ECF 164 at 291:9–:17 (identifying this exhibit). Plaintiffs’ witness Mr. Kirk Blaine testified that it was unlikely for this injury to have resulted from angling. *Id.* at 291:18–292:9. But based on testimony about competing potential causes of injury, this Court again cannot draw any further conclusions about the possible causes of this injury.

92. Mr. Dose testified that he has observed coho and other salmonids with a variety of injuries, including “bruising and gashes on their sides,” injuries to their operculum, injuries to their caudal or dorsal fins, and descaling. Trial Testimony, ECF 164 at 341:15–342:3. Mr. Dose suggested that these injuries may have resulted from a vertical fall after jumping at the dam. *Id.* at 341:19–:20, 342:11–343:2.

93. One of Defendant's witnesses, Mr. Scott Worsley, testified that he has seen coho salmon downstream of Winchester Dam with similar injuries, including gashes, injuries to fins or missing fins, and injured or missing operculum. Trial Testimony, ECF 166 at 772:6–24. Mr. Worsley testified that about half the salmon he saw had some sort of abrasion, such as an injury to a fin or some missing scales, *id.* at 773:12–23, and approximately five percent had a significant injury, *id.* at 773:24–774:7. Mr. Worsley's observations were made in the lower mainstem of the Umpqua River, below the Winchester Dam, so these injuries cannot be attributed to the dam. This Court will credit Mr. Worsley's testimony and finds it persuasive that many of the injuries observed by Mr. Dose were incurred before the fish made it to Winchester Dam, whether by predators, anglers, or natural or artificial obstacles in the river below the Winchester Dam. Considering Mr. Dose's and Mr. Worsley's testimony together, this Court does not find Mr. Dose's observations sufficient to find by a preponderance of the evidence that these injuries were caused by the Winchester Dam as opposed to other sources of injury that migrating salmonids may encounter and that cause similar types of injuries.

94. An ODFW employee, Mr. Fabian Carr, stated that he had observed coho passing through the fish ladder with "recent physical injuries" and that one to five percent of salmon passing through the ladder had such injuries. Trial Testimony, ECF 165 at 679:1–14. This rate is similar to Mr. Worsley's observation of injury rates of coho before they arrive at Winchester Dam. Mr. Carr could not identify the source of these injuries or attribute them to the Winchester Dam. *Id.* at 680:1–12. He had seen some coho salmon with an "acute hole" through them, but could not determine whether this was the result of jumping at the dam or lampreys. *Id.* at 684:8–685:3. Other injuries could be attributed to predation, *id.* at 701:2–7, gillnetting, *id.* at 701:14–24, or abrasions from contacting a cable used in ODFW's broodstock trapping operations, *id.* at

702:9–:16. Based on the evidence presented at trial, this Court cannot find by a preponderance of the evidence that these injuries were caused by jumping at false attraction flows. This Court finds that Plaintiff failed to present credible evidence of coho mortality attributable to the Winchester Dam.

2. Delay

95. False attraction flows induce fish to jump at them, causing fish to spend time and energy jumping at locations that will not allow them to pass the dam. Trial Testimony, ECF 164 at 448:2–:13.

96. Unsuccessful jumping at false attraction flows leads fish to expend unnecessary energy and causes physiological stress, Trial Testimony, ECF 164 at 419:15–:23, which reduces the likelihood of successful spawning and may prevent fish from reaching ideal spawning habitat, *id.* at 332:24–333:12.

97. This Court finds that the flows through the Winchester Dam likely cause a minimal amount of delay to at least some migrating salmon. Trial Testimony, ECF 164 at 451:15–452:3.

98. Plaintiffs’ experts did not seek to quantify the delay caused by these flows. *See* Findings of Fact No. 120–124.

99. While coho salmon have been observed jumping at various points along Winchester Dam, this Court credits testimony that they do not jump at flows as often as other salmonids like steelhead trout and chinook salmon. Trial Testimony, ECF 165 at 681:2–:24, ECF 166 at 799:1–:9.

100. As explained in more detail below in Findings of Fact No. 120–124, this Court does not find that any delay caused by the dam significantly impairs essential behavioral patterns.

G. Direct Injury to or Delay of Adult Coho Caused by Fish Ladder Design

101. The parties do not dispute that the fish ladder at Winchester Dam does not meet current criteria for fish passage design established by the National Marine Fisheries Service or the Oregon Department of Fish and Wildlife. Trial Testimony, ECF 165 at 650:24–651:1, ECF 166 at 936:6–:11.

102. The fish ladder at Winchester Dam is located on the north side of the river, while most of the river’s flow is located to the south, separated from the ladder entrance by an area of shallow bedrock. Trial Testimony, ECF 163 at 98:15–99:5, 100:2–:4. Fish migrating upstream following the river’s thalweg have to cross that shallow area to find the fish ladder entrance on the other side of the dam. *Id.* at 107:6–:11, ECF 164 at 320:17–321:4. 91. The approach channel to the fish ladder’s “high-flow entrance” is a channel dug out of the river to facilitate hydropower generation. Trial Testimony, ECF 163 at 109:14–110:5. The water in the channel is calm and slow-moving, which makes it unattractive to migrating fish. *Id.* at 130:1–:18.

103. The approach to the fish ladder’s “low-flow entrance” is typically one to three feet of water, including turbulent areas and areas of exposed bedrock. Trial Testimony, ECF 163 at 110:16–111:2, 180:16–22, ECF 166 at 842:12–843:4. ODFW configures the ladder to use the low-flow entrance approximately 90% of the year. *Id.*, ECF 163 at 91:15–:16.

104. The flow of the river over the crest of the dam is deflected as it hits the area of shallow bedrock, creating a north–south flow diagonally across the channel. Trial Testimony, ECF 166 at 801:16–:21, 802:16–:18. This diagonal flow orients migrating salmon in a direction that leads them across the shallow area and toward the low-flow entrance to the fish ladder. *Id.* at 802:19–803:5.

105. Over the last ten years, an average of around 3,600 wild coho have successfully located the ladder and migrated upstream through the Winchester Dam fish ladder. Trial Testimony, ECF 166 at 790:16–21.

106. ODFW installed a small weir perpendicular to the dam to try to improve fish passage conditions near the entrance to the fish ladder. Trial Testimony, ECF 163 at 114:24–115:4.

107. The concrete walls of the fish ladder typically extend one foot or less above the surface of the water in the ladder pools. Trial Testimony, ECF 163 at 150:17–24.

108. The height of the walls in the ladder may allow fish transiting the ladder to land outside the ladder when jumping, either on top of the wall or outside the ladder structure entirely. Trial Testimony, ECF 163 at 151:7–11, ECF 164 at 469:17–470:25.

109. Some fish have been observed jumping in the fish ladder, Trial Testimony, ECF 163 at 195:19–25, ECF 166 at 839:13–840:5, and ODFW has installed fencing to keep fish in the ladder, *id.*, ECF 165 at 713:1–25, ECF 166 at 840:6–11.

110. This Court credited testimony that coho tend to jump less than other salmonids. Finding of Fact No. 79. Evidence of coho jumping in the ladder itself is limited, *see* Trial Testimony, ECF 165 at 680:19–21 (reporting no observations of coho jumping in the fish ladder chambers), and the ODFW fencing is typically put in place between April and October, *id.* at 713:18–25, outside of peak coho runs, *id.*, ECF 164 at 309:5–23, suggesting the fencing may be less necessary when coho salmon are the primary species in the ladder. This Court therefore finds only limited evidence that coho salmon jump in the fish ladder and that the evidence presented of fish jumping in the ladder is more likely to be steelhead or chinook.

1. Direct Injury

111. Resolving factual conflicts between Plaintiffs' experts' testimony and Defendant's experts' testimony, this Court finds that Plaintiffs have not proven by a preponderance of the

evidence that Oregon Coast coho are killed or injured by the Winchester Dam fish ladder. Evidence of take in the form of direct injury to coho was primarily presented in connection with the “false attraction flows” theory of take addressed above. To the extent that this Court’s findings of fact on the evidence related to coho injury from false attraction flows above also apply to this theory of take, the Court reaffirms Findings of Fact No. 77–94. Below, this Court addresses additional evidence of take that appears more directly attributable to fish ladder design.

112. Plaintiffs’ expert Mr. Dose suggested that fish may experience descaling injuries while attempting to jump in the ladder. Trial Testimony, ECF 164 at 342:20–343:2. Fish scales have historically been observed at a handful of places in the ladder. *Id.*, ECF 165 at 698:4–699:3. Mr. Dose has observed fish with descaling injuries navigating the fish ladder. *Id.*, ECF 164 at 346:14–16.

113. Defendant’s witness, Mr. Worsley testified that about half the salmon he saw downstream of the dam had an abrasion injury, such as an injury to a fin or some missing scales, Trial Testimony, ECF 166 at 773:12–23, and approximately five percent had a significant injury, *id.* at 773:24–774:7. This Court credited Mr. Worsley’s testimony and found it persuasive that many of the injuries observed by Mr. Dose were incurred before the fish made it to Winchester Dam, whether by predators, anglers, or natural or artificial obstacles in the river below the Winchester Dam. Considering Mr. Dose’s and Mr. Worsley’s testimony together, this Court does not find Mr. Dose’s observations sufficient to find by a preponderance of the evidence that these descaling injuries were caused by the design and condition of the fish ladder as opposed to other sources of injury that migrating salmonids encounter that may cause descaling injuries.

114. Another of Plaintiffs' witnesses, Jim McCarthy, testified that he observed an adult fish being pushed downstream away from the fish ladder entrance. Trial Testimony, ECF 163 at 200:4–201:7. This Court does not find that Mr. McCarthy's testimony proves by a preponderance of the evidence that this fish was killed or injured by the design of the approach to the fish ladder.

115. Exhibit 104 depicts a steelhead lying motionless at the bottom of the fish ladder. Trial Testimony, ECF 164 at 290:21–291:4 (identifying this exhibit). Mr. Dose testified that lying on the bottom of the fish ladder is an "atypical behavior," but noted that he did not see any major injuries on any fish in Exhibit 104. *Id.* at 346:6–:9. This Court does not find that this exhibit proves the fish ladder is causing injury or death.

116. Mr. Carr testified that he had occasionally observed dead coho around the dam, but that these appeared to either be victims of predation or coho that died after spawning. Trial Testimony, ECF 165 at 685:4–:21. Mr. Loomis also testified that he had seen one or two dead pre-spawning coho above the dam. *Id.*, ECF 166 at 806:19–807:4. No other evidence was presented of dead adult coho near the Winchester Dam, and Mr. Loomis testified that he was unaware of any members of the public ever reporting that they observed dead, pre-spawning coho at Winchester Dam. *Id.* at 808:3–:5. While the Court acknowledges that evidence of dead fish is likely to be limited because dead fish may sink or be consumed by predators, *see id.*, ECF 164 at 351:21–352:14, the Court does not find that the trial testimony established by a preponderance of the evidence that any feature of the dam is killing coho.

117. The Winchester Dam fish ladder contains a livestream camera, Trial Testimony, ECF 165 at 578:13–:17, and is immediately upstream of a popular park and boat ramp, *id.*, ECF 166 at

754:8–:11. This Court finds that, if significant fish mortality were occurring at Winchester Dam, it would likely be observable.

2. Delay

118. This Court credits testimony that several features of the fish ladder, including its location, Trial Testimony, ECF 163 at 153:18–154:4, ECF 164 at 418:20–419:3, the attraction flows from the fish ladder, *id.*, ECF 164 at 456:1–:22, turbulent flows near the fish ladder entrance, *id.*, ECF 163 at 118:14–:22, at 131:3–:9, 131:23–132:10, and in the ladder itself, *id.*, ECF 164 at 285:3–:7, 343:21–344:7; *see, e.g., id.* at 282:18–283:7, 281:6–:17, 345:13–:19, and fallback over the dam, *id.*, ECF 164 at 344:20–:25, may cause some level of delay in coho migration and spawning.

119. This Court also finds that efforts to locate and navigate the fish ladder require fish to expend energy, Trial Testimony, ECF 164 at 419:15–:23, necessarily diminishing the energy available to migrate upstream and to spawn, *id.* at 467:10–468:4.

120. This Court also finds, however, that Plaintiffs’ experts provided no evidence about the effect of this delay on coho spawning. Plaintiffs’ experts did not conduct a test or study to calculate the extent of the delay caused by the dam and did not present site-specific evidence suggesting any delay caused by the dam caused either delayed mortality or reduced spawning effectiveness. *See* Trial Testimony, ECF 163 at 171:10–:11 (noting that, while the dam and ladder has an impact on coho, “[w]e just don’t know what the total impact is”); ECF 164 at 382:24–383:2, 491:24–:25 (“The magnitude [of the harm], of course, is where there’s less certainty.”); ECF 165 at 509:25–510:13. Plaintiffs’ experts also presented no evidence suggesting that any delay caused by the dam was measurable at the population level.

121. This Court credits testimony from ODFW employee Fabian Carr that coho have taken between 40 seconds and a few hours to pass through the fish ladder. Trial Testimony, ECF 165 at 677:4–12.

122. Although this Court finds that Mr. Courter’s opinion that coho are able to effectively navigate the fish ladder relies on limited data, *see* Trial Testimony, ECF 166 at 874:18–23 (noting velocity data is limited to “spot measurements” by ODFW taken in 2007), *id.* at 934:2–14 (acknowledging that stream flows may sometimes significantly exceed the 2007 measurements), available evidence suggests that water velocities in the ladder generally do not exceed coho swimming speeds, *id.* at 911:10–25; *see also id.* at 914:12–915:7. This Court finds that coho generally do not have to rely on burst swimming to navigate the fish ladder. *Id.* at 816:20–817:4.

123. Defendant’s expert Mr. Courter prepared a report comparing observations of fish in the ladder at Winchester Dam with peak spawning timing at upstream spawning locations. *See* Trial Testimony, ECF 166 at 901:13–905:2 (describing this study). Mr. Courter’s analysis shows that fish pass through Winchester Dam long before spawning, *see id.* at 902:13–903:12, and that there is no obvious evidence of significant delay caused by the Winchester Dam, *id.* at 903:21–904:10. While Plaintiffs’ experts identify limitations to the value of the ODFW spawning surveys in the North Umpqua basin, *see id.*, ECF 164 at 361:14–367:20 (discussing limits to these data), this Court finds Mr. Courter’s analysis credible and will treat it as relevant evidence weighing against a finding of significant delay.

124. Defendant’s expert Mr. Loomis also tracked coho migration by charting daily coho counts at Winchester Dam between September 30 and November 30, 2023, against river flows during that period, using the livestream fish camera to track coho passage. Trial Testimony, ECF

166 at 812:5–813:7. Mr. Loomis’s study found that coho migration periods are driven chiefly by river flows, with no indication of any delay at Winchester Dam. *Id.* at 813:16–814:5. This Court finds Mr. Loomis’s study credible and will treat it as relevant evidence weighing against a finding of significant delay.

H. Direct Injury to Juvenile Coho During Outmigration

125. The Winchester Dam does not have a dedicated juvenile fish passage structure. Trial Testimony, ECF 164 at 483:18–484:7. Instead, the vast majority of outmigrating juvenile coho salmon pass over the Winchester Dam by falling over its crest. *Id.*, ECF 163 at 84:14–:19, ECF 164 at 350:1–:18, 484:1–:7.

126. Across the dam crest, this represents a drop of approximately 16 vertical feet. Trial Testimony, ECF 163 at 84:20–85:9.

127. The area directly below the crest of the dam beyond the concrete sill is primarily shallow water over bedrock, with a handful of areas of deeper water. Trial Testimony, ECF 163 at 87:11–:22.

128. Plaintiffs allege that the dam is injuring or killing juvenile coho as they fall over the crest of the dam. Plaintiffs’ witnesses did not recount any observations of juveniles falling directly onto concrete or bedrock below the dam. *See* Trial Testimony, ECF 164 at 350:3–:9.

129. On average, the depth of water below the dam is approximately two to three feet during the summer. Trial Testimony, ECF 165 at 592:21–593:6. The water level can be significantly higher during higher flow conditions. *Id.* at 593:4–:11.

130. Plaintiffs did not present evidence of dead or injured juveniles beyond one observation of dead juveniles during the 2018 repairs to the dam, Trial Testimony, ECF 165 at 688:1–:20, which does not appear to be directly linked to falling over the dam’s crest. *See id.*, ECF 163 at 169:11–:19 (noting no direct evidence of juvenile mortality); ECF 164 at 351:21–:23 (same).

Defendant's experts stated that they had never observed dead juvenile salmon or steelhead in the vicinity of the dam. *Id.*, ECF 166 at 755:25–756:3, 826:24–827:10.

131. While Plaintiffs' witnesses observed numerous predators at the Winchester Dam, Trial Testimony, ECF 164 at 350:24–351:20, there is no persuasive evidence in the record to suggest those predators are present at the dam because of the number of juvenile coho that have been injured or stunned after passing over the Winchester Dam.

132. Although Plaintiffs' experts suggested that there is a risk of juvenile fish being trapped in the dam structure itself, Trial Testimony, ECF 164 at 488:16–489:17, or in its auxiliary water system, *id.*, ECF 163 at 157:1–:14, Plaintiffs presented no evidence that this is occurring.

133. Based on the above Findings, this Court finds that Plaintiffs have not proven by a preponderance of the evidence that juvenile Oregon Coast coho are killed or injured while passing over the crest of Winchester Dam.

I. Population-Level Recovery

134. Plaintiffs' expert Mr. Dose testified that ODFW's Oregon Coast Coho Conservation Plan strongly suggests that the North Umpqua basin is not "fully seeded" with spawning coho. Trial Testimony, ECF 164 at 366:4–367:24.

135. Mr. Dose also testified that he had observed prime coho spawning habitat in streams that had not been surveyed by ODFW that were either unoccupied or had a very low density of spawning coho. Trial Testimony, ECF 164 at 356:6–357:9.

136. Mr. Dose pointed out that ODFW's surveys examined very few data points, and that what they did examine revealed a very low coho density. Trial Testimony, ECF 164 at 364:8–365:3.

137. Defendant's expert Mr. Loomis testified that his view of the ODFW data suggested that the Umpqua basin is "fully seeded" with spawning coho in most years, meaning that adult

returning coho are reproducing at a level that maximizes the production of juvenile coho for the available habitat. Trial Testimony, ECF 166 at 795:9–796:7.

138. Defendant’s expert Mr. Courter testified that the primary limiting factor on coho populations in the North Umpqua is a lack of suitable overwintering habitat, not the Winchester Dam. Trial Testimony, ECF 166 at 879:5–881:22, 887:5–888:9.

139. Mr. Courter’s analysis of coho population trends led him to conclude that coho populations in the North Umpqua are mainly limited by available habitat and ocean conditions, and that the population has reached a stable equilibrium because “the habitat is now fully saturated upstream at Winchester Dam.” Trial Testimony, ECF 166 at 894:13–895:25.

140. Mr. Courter’s analysis suggested that the North Umpqua population is performing similar to other populations of Oregon Coast coho that do not encounter dams in the course of their migrations. Trial Testimony, ECF 166 at 897:2–898:19.

141 No assessment, conservation plan, or status review from the National Marine Fisheries Service or ODFW has identified the Winchester Dam as a significant limiting factor for the recovery of the North Umpqua coho population. Trial Testimony, ECF 166 at 889:14–:20.

142. This Court credits Mr. Courter’s testimony that the population of Oregon Coast coho in the North Umpqua basin has reached a stable equilibrium state, but also credits Mr. Dose’s testimony for the point that it is possible that the basin could sustain at least some number of additional adult coho salmon.

CONCLUSIONS OF LAW

Based on this Court’s factual findings, this Court reaches the following conclusions of law. This Court begins, as it must, by establishing its jurisdiction over this action. *Sinochem Int’l Co. v. Malaysia Int’l Shipping Corp.*, 549 U.S. 422, 430–31 (2007). This Court then addresses the merits of Plaintiffs’ claim.

A. Jurisdiction

1. Plaintiffs bring suit under the Endangered Species Act’s citizen-suit provision, 16 U.S.C. § 1540(g). This Court has subject-matter jurisdiction over this action because Plaintiffs’ claim arises under federal law, 28 U.S.C. § 1331, so long as Plaintiffs establish standing to bring this case, *see Lujan v. Defenders of Wildlife*, 504 U.S. 555, 561 (1992).

2. Venue is proper in the District of Oregon because Defendant, the Winchester Dam, the North Umpqua River, and the Oregon Coast coho salmon are all located within this District. 28 U.S.C. §§ 117, 1391.

B. Standing

3. To establish standing, Plaintiffs must show that they have (1) suffered an “injury in fact” that is (2) fairly traceable to the challenged conduct of the defendant and (3) likely to be redressed by a favorable judicial opinion. *Lujan*, 504 U.S. at 560–61.

4. As organizations, Plaintiffs “may assert standing on behalf of their members as long as the ‘members would otherwise have standing to sue in their own right, the interests at stake are germane to the organization’s purpose, and neither the claim asserted nor the relief requested requires the participation of individual members in the lawsuit.’” *Wash. Env’t Council v. Bellon*, 732 F.3d 1131, 1139 (quoting *Friends of the Earth, Inc. v. Laidlaw Env’t Servs., Inc.*, 528 U.S. 167, 181 (2000)).

5. Plaintiffs in environmental cases adequately allege an injury-in-fact when “they aver that they use the affected area and are persons for whom the aesthetic and recreational values of the area will be lessened by the challenged activity.” *Ass’n of Irrigated Residents v. EPA*, 10 F.4th 937, 943 (9th Cir. 2021) (cleaned up) (quoting *Laidlaw*, 528 U.S. at 183); *see Lujan*, 504 U.S. at 562–63 (“[T]he desire to use or observe an animal species, even for purely esthetic purposes, is undeniably a cognizable interest for purpose of standing.”).

6. A plaintiff “need not prove that the action it attacks is unlawful in order to have standing to level that attack.” *Muir v. Navy Fed. Credit Union*, 529 F.3d 1100, 1106 (D.C. Cir. 2008).

While standing must be shown “with the manner and degree of evidence required at the successive stages of the litigation,” *Lujan*, 504 U.S. at 561, “standing in no way depends on the merits” of the Plaintiffs’ case, *Warth v. Seldin*, 422 U.S. 490, 500 (1975), and this Court must avoid conflating standing with the merits, *Ecological Rts. Found. v. Pacific Lumber Co.*, 230 F.3d 1141, 1151–53 (9th Cir. 2000).

7. Standing is an “irreducible constitutional minimum” that defines this Court’s jurisdiction. *Lujan*, 504 U.S. at 560. “The jurisdictional question of standing precedes, and does not require, analysis of the merits.” *Equity Lifestyle Props., Inc. v. County of San Luis Obispo*, 548 F.3d 1184, 1189 n.10 (9th Cir. 2008). This Court may not address the merits of any claims before first concluding that subject-matter jurisdiction exists. *Bell v. Hood*, 327 U.S. 678, 682 (1946). To the extent Plaintiffs’ standing is intertwined with the merits of their claim, dismissal for lack of jurisdiction is improper. *See Williston Basin Interstate Pipeline Co. v. An Exclusive Gas Storage Leasehold & Easement in the Cloverly Subterranean Geological Formation*, 524 F.3d 1090, 1094–96 (9th Cir. 2008).

8. Each Plaintiff has members who have aesthetic, recreational, or economic interests in coho salmon populations in the North Umpqua basin, Findings of Fact No. 1–12, which is sufficient to establish that an injury to coho salmon interests on the North Umpqua River would cause injury to each Plaintiff. *See Nw. Env’t Def. Ctr. v. Bonneville Power Admin.*, 117 F.3d 1520, 1528–29 (9th Cir. 1997).

9. Plaintiffs bring this action in an effort to remove the Winchester Dam, which they believe is reducing the number of coho salmon they can view, photograph, and catch on the North Umpqua River.

10. Defendant challenges Plaintiffs' standing, arguing that their injuries are caused by low coho populations and that, to establish injury-in-fact, they must show that removing the Winchester Dam would increase overall coho populations in the North Umpqua basin. In Defendant's view, "Plaintiffs must prove that the Winchester Dam is causing *depressed* coho populations, and that the relief sought would redress Plaintiffs' alleged injury by *improving* coho populations in the North Umpqua." Proposed Findings and Conclusions, ECF 159 ¶ 64 & n.9.

11. This Court disagrees with Defendant's framing of Plaintiffs' burden and concludes that Plaintiffs have established a cognizable and redressable injury.² In evaluating standing, this Court must assume that Plaintiffs are correct on the merits of their argument that the Winchester Dam is causing take of coho salmon. *See Tanner-Brown v. Haaland*, 105 F.4th 437, 445 (D.C. Cir. 2024). In this case, assuming Plaintiffs are correct on the merits, granting their requested relief would allow more fish to migrate upstream of the dam into the portions of the North Umpqua River used by their members, thus partially redressing their injury. *See WildEarth Guardians v. U.S. Dep't of Agric.*, 795 F.3d 1148, 1157 (9th Cir. 2015) (holding that "the mere existence of multiple causes of an injury does not defeat redressability" where a defendant "is at least partially causing the alleged injury").

12. If habitat availability is the primary limitation on the North Umpqua coho population, as Defendant contends, these additional fish may spawn in poor habitat or their offspring may be

² This Court does not evaluate the standing of the trade organization Plaintiffs, who have distinct interests in coho populations, because it concludes that the other Plaintiffs have standing. *Townley v. Miller*, 722 F.3d 1128, 1133 (9th Cir. 2013).

unable to find suitable overwintering habitat, thus keeping overall population levels roughly stable. *See* Trial Testimony, ECF 166 at 921:2–:8 (testifying that removing Winchester Dam would have almost no population-level effect given other limitations on population).

13. The stable overall population levels, however, masks the fact that there might be more adult coho salmon present during their migration in the portions of the North Umpqua River where Plaintiffs’ members would like to see more coho, thus addressing their injury.

14. Plaintiffs plausibly allege that removing the Winchester Dam would remedy their injury in part, which is all that they must do to establish Article III standing. *See Uzuegbunam v. Preczewski*, 141 S. Ct. 792, 801 (2021) (quoting *Church of Scientology v. United States*, 506 U.S. 9, 13 (1992)).

15. Although this Court concludes below that Plaintiffs do not prevail on the merits of their claims, “the fact that the court can award no relief does not mean that the court lacked jurisdiction to hear the case.” *Iten v. Los Angeles*, 81 F.4th 979, 985 (9th Cir. 2023). This Court concludes that Plaintiffs have established standing.

C. Take Under the Endangered Species Act

16. Section 9 of the Endangered Species Act, codified at 16 U.S.C. § 1538, makes it unlawful for any person to “take” any endangered species of fish or wildlife within the United States.³

17. “The term ‘take’ means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” 16 U.S.C. § 1532(19).

³ Section 4(d) provides that these protections may also be extended to threatened species. The Oregon Coast evolutionarily significant unit (ESU) of coho salmon is an ESA-listed threatened species, and the Secretary has extended the ESA’s take prohibition to this species. 50 C.F.R. § 223.203(a) (2024).

18. The statutory term “harm” includes “significant habitat modification or degradation” that “significantly impair[s] essential behavioral patterns” like migrating or spawning. 50 C.F.R. § 222.102. This definition of the term best aligns with “an ordinary understanding of the word ‘harm,’” as well as the structure and purpose of the Endangered Species Act. *See Babbitt v. Sweet Home Chapter of Cmty. for a Great Or.*, 515 U.S. 687, 697–700 (1995) (interpreting materially identical language in 50 C.F.R. § 17.3).

19. There are two elements of a take claim: First, the plaintiff “must prove that the injury to identifiable members of the protected species is of a type covered by the ESA.” *Cascadia Wildlands v. Scott Timber Co.*, 105 F.4th 1144, 1156 (9th Cir. 2024). The plaintiff must also prove “that the relationship between the challenged activity and the injury meet the standards of proximate causation.” *Id.* (citing *Sweet Home*, 515 U.S. at 708–09 (O’Connor, J., concurring)).

20. This Court finds that Plaintiffs have not presented sufficient evidence to establish that the Winchester Dam physically kills or injures adult or juvenile Oregon Coast coho salmon or significantly impairs their migration. Findings of Fact No. 77–94, 111–115, 128–133.

21. This Court found above that false attraction flows through the Winchester Dam may delay the migration of Oregon Coast coho salmon and cause them to expend additional energy to navigate past the dam. Findings of Fact, No. 95–97.

22. This Court also found above that the design and location of the Winchester Dam’s fish ladder may delay the migration of Oregon Coast coho salmon and cause them to expend additional energy to navigate past the dam. Findings of Fact, No. 118–119.

23. This Court finds, however, that Plaintiffs have not proven that either of these features of the Winchester Dam “significantly” impairs coho migration, spawning, or other essential behavioral patterns. *See* Findings of Fact No. 98–100, 120–124.

24. Proximate cause requires a “sufficient causal connection between the alleged irreparable harm and the activity to be enjoined,” *Nat’l Wildlife Fed’n v. Nat’l Marine Fisheries Serv.*, 886 F.3d 803, 819 (9th Cir. 2018), such that the harm may be “fairly traceable to the challenged action[s],” *Cascadia Wildlands v. Kitzhaber*, 911 F. Supp. 2d 1075, 1084 (D. Or. 2012).

25. This Court concludes that Plaintiffs have not proven by a preponderance of the evidence that Defendant is liable for “take” of Oregon Coast coho salmon under the Endangered Species Act, 16 U.S.C. § 1538(a)(1)(B).

26. This Court concludes that Defendant’s ownership and operation of the Winchester Dam does not mean that its actions are a proximate cause of any take that is directly attributable to the Oregon Department of Fish and Wildlife’s fish ladder counting or trapping operations or associated maintenance, because that take was not a foreseeable result of Defendant’s decision to grant ODFW a perpetual easement to conduct those activities in 1970. The Court therefore declines to enter specific findings of fact on those activities. *See* Plaintiffs’ Proposed Findings, ECF 161 ¶¶ 191–197 (requesting such findings); Defendant’s Proposed Findings, ECF 159 ¶¶ 41–45.

CONCLUSION

Based on the foregoing Findings of Fact and Conclusions of Law, the Court concludes that WWCD is not liable for take of Oregon Coast coho salmon through its operation of the Winchester Dam. The parties are ORDERED to jointly submit a form of judgment consistent with these Findings and Conclusions to the Court by August 27, 2025.

IT IS SO ORDERED.

DATED this 21st day of August, 2025.

/s/ Karin J. Immergut
Karin J. Immergut
United States District Judge